

AMENDMENTS TO THE CLAIMS:

Claim 254 is amended. Claims 141-167 and 254-160 are pending. The following is the status of the claims of the above-captioned application, as amended.

Claims 1-140 (Cancelled.)

Claim 141. (Previously presented.) An isolated variant of a parent glucoamylase comprising a mutation of amino acid position 402 in the amino acid sequence shown in SEQ ID NO:2 or at a corresponding position in a homologous glucoamylase having at least 80% homology with the amino acid sequence shown in SEQ ID NO:2, and wherein said variant has glucoamylase activity.

Claim 142. (Previously presented.) The variant of claim 141, wherein said homologous glucoamylase has at least 90% homology to SEQ ID NO:2.

Claim 143. (Previously presented.) The variant of claim 141, wherein said homologous glucoamylase has at least 95% homology to SEQ ID NO:2.

Claim 144. (Previously presented.) The variant of claim 254, wherein said variant comprises a mutation at position 1 in the amino acid sequence shown in SEQ ID NO:2 or at a corresponding position in said homologous glucoamylase.

Claim 145. (Previously presented.) The variant of claim 254, wherein said variant comprises a mutation at position 2 in the amino acid sequence shown in SEQ ID NO:2 or at a corresponding position in said homologous glucoamylase.

Claim 146. (Previously presented.) The variant of claim 254, wherein said variant comprises a mutation at position 3 in the amino acid sequence shown in SEQ ID NO:2 or at a corresponding position in said homologous glucoamylase.

Claim 147. (Previously presented.) The variant of claim 254, wherein said variant comprises a mutation at position 4 in the amino acid sequence shown in SEQ ID NO:2 or at a corresponding position in said homologous glucoamylase.

Claim 148. (Previously presented.) The variant of claim 254, wherein said variant comprises a mutation at position 5 in the amino acid sequence shown in SEQ ID NO:2 or at a corresponding position in said homologous glucoamylase.

Claim 149. (Previously presented.) The variant of claim 254, wherein said variant comprises a mutation at position 6 in the amino acid sequence shown in SEQ ID NO:2 or at a corresponding position in said homologous glucoamylase.

Claim 150. (Previously presented.) The variant of claim 254, wherein said variant comprises a mutation at position 7 in the amino acid sequence shown in SEQ ID NO:2 or at a corresponding position in said homologous glucoamylase.

Claim 151. (Previously presented.) The variant of claim 254, wherein said variant comprises a mutation at position 8 in the amino acid sequence shown in SEQ ID NO:2 or at a corresponding position in said homologous glucoamylase.

Claim 152. (Previously presented.) The variant of claim 254, wherein said variant comprises a mutation at position 9 in the amino acid sequence shown in SEQ ID NO:2 or at a corresponding position in said homologous glucoamylase.

Claim 153. (Previously presented.) The variant of claim 254, wherein said variant comprises a mutation at position 11 in the amino acid sequence shown in SEQ ID NO:2 or at a corresponding position in said homologous glucoamylase.

Claim 154. (Previously presented.) The variant of claim 254, wherein said variant comprises a mutation at position 10 in the amino acid sequence shown in SEQ ID NO:2 or at a corresponding position in said homologous glucoamylase.

Claim 155. (Previously presented.) The variant of claim 254, wherein said variant comprises a mutation at position 12 in the amino acid sequence shown in SEQ ID NO:2 or at a corresponding position in said homologous glucoamylase.

Claim 156. (Previously presented.) The variant of claim 254, wherein said variant comprises a

mutation at position 13 in the amino acid sequence shown in SEQ ID NO:2 or at a corresponding position in said homologous glucoamylase.

Claim 157. (Previously presented.) The variant of claim 254, wherein said variant comprises a mutation at position 14 in the amino acid sequence shown in SEQ ID NO:2 or at a corresponding position in said homologous glucoamylase.

Claim 158. (Previously presented.) The variant of claim 254, wherein said variant comprises a mutation at position 15 in the amino acid sequence shown in SEQ ID NO:2 or at a corresponding position in said homologous glucoamylase.

Claim 159. (Previously presented.) The variant of claim 254, wherein said variant comprises a mutation at position 16 in the amino acid sequence shown in SEQ ID NO:2 or at a corresponding position in said homologous glucoamylase.

Claim 160. (Previously presented.) The variant of claim 254, wherein said variant comprises a mutation at position 17 in the amino acid sequence shown in SEQ ID NO:2 or at a corresponding position in said homologous glucoamylase.

Claim 161. (Previously presented.) The variant of claim 254, wherein said variant comprises a mutation at position 18 in the amino acid sequence shown in SEQ ID NO:2 or at a corresponding position in said homologous glucoamylase.

Claim 162. (Previously presented.) The variant of claim 254, wherein said variant comprises a mutation at position 19 in the amino acid sequence shown in SEQ ID NO:2 or at a corresponding position in said homologous glucoamylase.

Claim 163. (Previously presented.) The variant of claim 254, wherein said variant comprises a mutation at position 21 in the amino acid sequence shown in SEQ ID NO:2 or at a corresponding position in said homologous glucoamylase.

Claim 164. (Previously presented.) The variant of claim 254, wherein said variant comprises a mutation at position 22 in the amino acid sequence shown in SEQ ID NO:2 or at a corresponding

position in said homologous glucoamylase.

Claim 165. (Previously presented.) The variant of claim 254, wherein said variant comprises a mutation at position 23 in the amino acid sequence shown in SEQ ID NO:2 or at a corresponding position in said homologous glucoamylase.

Claim 166. (Previously presented.) The variant of claim 254, wherein said variant comprises a mutation at position 24 in the amino acid sequence shown in SEQ ID NO:2 or at a corresponding position in said homologous glucoamylase.

Claim 167. (Previously presented.) The variant of claim 254, wherein said variant comprises a mutation at position 25 in the amino acid sequence shown in SEQ ID NO:2 or at a corresponding position in said homologous glucoamylase.

Claims 168-253 (Cancelled.)

Claim 254. (Currently amended.) An isolated variant of a parent glucoamylase comprising a substitution of an amino acid at one or more of the following amino acids in the amino acid sequence shown in SEQ ID NO:2 or at a corresponding position in a homologous glucoamylase having at least 80% homology with the amino acid sequence shown in SEQ ID NO:2, and wherein said variant has glucoamylase activity.:

1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 10, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 23, 24, 25 and 402.

Claim 255 (Previously presented.) The variant of claim 254, wherein said homologous glucoamylase has at least 90% homology to SEQ ID NO:2.

Claim 256. (Previously presented.) The variant of claim 254, wherein said homologous glucoamylase has at least 95% homology to SEQ ID NO:2.

Claim 257 (Previously presented.) The variant of claim 254, wherein said homologous glucoamylase has at least 97% homology to SEQ ID NO:2.

Claim 258. (Previously presented.) The variant of claim 254, wherein said homologous

glucoamylase has at least 99% homology to SEQ ID NO:2.

Claim 259 (Previously presented.) The variant of claim 141, wherein said homologous glucoamylase has at least 97% homology to SEQ ID NO:2.

Claim 260. (Previously presented.) The variant of claim 141, wherein said homologous glucoamylase has at least 99% homology to SEQ ID NO:2.